STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

ENERGY POLICY DIVISION

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SUBJECT: DEMAND RESPONSE ISSUE PAPER FOR 5TH POWER PLAN – DOCUMENT 2002-18

Dear Mr. Walker,

Thank you for the opportunity to provide comments on the Council's demand response paper on behalf of Energy Policy at the Washington Office of Trade and Economic Development. More importantly, I thank the Council for initiating a regional analysis on the potential role of demand response in meeting the Northwest's power needs. There are regions in the country with months to decades of experience in projects ranging from real time pricing to load management programs respectively – all designed to achieve peak load reductions among other things. The Northwest does not have this vast experience yet and there is a great deal of value in facilitating a regional dialogue on this issue.

I think the Council paper provides a good overview of most of the types of demand response programs available and has effectively categorized them. Because of this, I have no comments to make regarding the current content of the paper. However, I would like to offer some comments on a few items that did not get covered in the Council's paper. I believe the final paper, or chapter for inclusion in the Power Plan, would benefit by addressing these issues.

There needs to be some reference to what customers, particularly industrial customers, are doing in response to these demand response or load management programs. That is many industrial customers respond to demand response programs by relying on their own back-up generators. These are frequently higher polluting power generators that operate at higher than typical power costs. There is anecdotal data that a variety of customers, including agricultural irrigation customers, may rely on similar back-up generation when participating in such load reduction programs. It is important to include this in the discussion of demand response efforts because it indicates that there may be economic and environmental costs, beyond the utility program, that need to be analyzed.

There seems to be little reference to the decades of experience that many utilities have in operating voluntary, utility-managed, load control programs. There are years of results from air conditioning load control programs in the Midwest or Southeast, to water heater load control programs in the Northeast, etc., from which we in the Northwest could benefit. The Council's paper may allude to these programs in the paragraph, "Payments for reductions – direct control" but it is not clear that is the case. This paragraph suggests that the direct control programs are not voluntary and that they rely on advanced technologies to implement. These programs are typically voluntary and can operate with technologies that have been in place for years. There is a wealth of information in the industry research and journals outlining the types of programs, the costs of such programs, participation rates, customer receptivity, required equipment, etc. that is available for summarizing and disseminating in the Northwest.

Finally, I think a real value that the Council could add at this start of a regional dialogue on demand response (and peak load management) is analysis of the frequency and duration of events that most severely strain the capacity, or energy supply, of our power system. This could include analyzing the likely number of events during a multi-year period that extremely effect the supply and price of power in the Northwest such as unscheduled west coast power outages, artic blasts, droughts, transmission constraints, etc. Additionally, the Council could include in its analysis the costs or frequency of altering river operations in order to avoid power emergencies that result in compromising fish management. If regional stakeholders and utility planners had better data regarding the frequency and duration of such events, then we, as an industry, may adopt and design strategies that more appropriately and cost-effectively address the energy or capacity constraints that are most dramatically increasing the cost of our electricity or reducing the reliability of our power system. (For example, is our biggest constraint daily peak loads, seasonal peak loads, annual droughts, or a dozen critical events during the year?) This information may also assist in determining whether targeted energy efficiency measures or specific distributed technologies have added value to a utility or the region's power system.

The last page of your paper includes questions to stakeholders. Here are our responses to a few of your questions. We, in Energy Policy, see a major drawback to real time pricing being the risk of exposing retail customers to the volatility of wholesale market prices. Washington's legislature has distinctly avoided adopting legislation that undermines the vertically integrated electricity industry and has avoided exposing retail customers to uncertain market prices. "Real-time pricing may expose customers to market electricity prices without any choice of provider and without the necessary capability to manage their consumption. Participation has to be voluntary to avoid risk-averse customers or customers with little or no ability to respond to real-time prices having to pay volatile electricity prices."[1]

There are additional sources of data on load control programs in any number of places. Some of the more contemporary demand response programs are taking place in California with the California Energy Commission facilitating the development of programs and the New England Independent System Operator offering opportunities for analyzing the effectiveness of demand response programs. Such local experts as Bonneville's Energy Efficiency Vice President have first-hand experience with such programs from his tenure at Sacramento Municipal Utility District.

[1] "2001 Biennial Energy Report," Washington State Office of Trade and Economic Development, pg. 1-36. http://www.energy.cted.wa.gov/BR2001/default.htm.

We believe the Council can play an important role in further developing the depth and breadth of shared knowledge in the Northwest on demand response opportunities. As mentioned earlier, a first step could be analyzing the frequency and duration of events that strain our electricity supplies and costs. The Council's paper scratches the surface of demand response possibilities. Next steps could include assessing a variety of the types of programs implemented elsewhere, the costs and benefits (or expected outcomes) of these programs, the context of these programs (e.g., summer daily supply constraints), the success of these programs, and the environment in which they were operated.

Our thanks to the Council for their work on this. We look forward to continuing to work with the Council on demand response issues. It would be very useful to include the outcomes of this work in the Council's Power Plan.

Respectfully Submitted,

Tony Usibelli,
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